UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

OFFICE OFPESTICIDE PROGRAMS REGISTRATION DIVISION

January 24, 2018

Subject:

Name of Pesticide Product: ANTI-MOSQUITO PAINT

EPA Reg. No:

46197-E

DP Barcode:

439286

Decision No:

527182 R260

Action Code: PC Code

109701

From:

Princess Campbell, DVM, MS, DACVPM

CITAB

Through:

PV Shah, PhD

Branch Chief, CITAB

Registration Division (7505P)

To:

Michael Wagman/Jennifer Gaines RM 04

Invertebrate and Vertebrate Branch I

Registration Division (7505P)

Applicant:

Technology Sciences Group, Washington, DC 20036

for KANSAI PAINT CO. LTD

Osaka Japan,

FORMULATION FROM LABEL:

Active Ingredient(s):

% by wt.

Permethrin

Other Ingredients:

99.0

Total:

100.0

ACTION REQUESTED: "Kansai Paint Co. has submitted an application to register a paint that contains permethrin to kill mosquitoes. Since this is Zika related we have been trying to expedite these actions. ..."

Permethrin
PC Code-109701

Reviewer: Princess Campbell, DVM

BACKGROUND: Technology Sciences Group submitted an application on behalf of Kansai Paint Co., to register their Anti Mosquito Paint product. This will be the first paint with the documented ability to kill mosquitoes. Kansai has already registered this product in Malaysia and Singapore. The application package included six acute toxicity studies, MRIDs 50192903-50192908. The studies were conducted in India in 2015.

RECOMMENDATIONS/FINDINGS:

- 1. In the acute oral study, rats in Step I and Step II were dosed with 300 mg/kg, while rats in Step III and Step IV were dosed with 2000 mg/kg. Since only two doses were used the LD50 should be ">2000 mg/kg" and not "5000 mg/kg" as stated in the study.
- 2. The Basic and Alternate (Alt 1, Alt 2, Alt 3) CSFs submitted for 46197-E must be reviewed and accepted by the product chemists in the Chemistry, Inerts and Toxicology Assessment Branch.
- 3. The acute toxicity profile for the current formulation is as follows:

Acute oral toxicity	III	Acceptable	MRID 50192903
Acute dermal toxicity	III .	Acceptable	MRID 50192904
Acute inhalation	IV	Acceptable	MRID 50192905
Primary eye irritation	IV	Acceptable	MRID 50192906
Primary skin irritation	IV	Acceptable	MRID 50192907
Dermal sensitization	sensitizer	Acceptable	MRID 50192908

Based on the acute toxicity profile the following is the precautionary label language:

Permethrin PC Code-109701

Reviewer: Princess Campbell, DVM

PRODUCT ID #:

46197-E

PRODUCT NAME:

Anti Mosquito Paint

Precautionary Statements:

Signal Word: CAUTION

Hazards to Humans and Domestic Animals:

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Child Hazard Warning:

Keep out of Reach of Children.

First Aid:

If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything to an unconscious person.

If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

User Safety Recommendations:

Users should:

- -Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- -Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- -Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change clothing.

Permethrin PC Code-109701

Reviewer: Princess Campbell, DVM

1. DP BARCODE: 439286

2. PC CODE: 109701

3. CURRENT DATE: January 24, 2018

4. TEST ARTICLES: Anti Mosquito Paint; Batch # AN/KNP/MB/001, 0.939% permethrin; free flowing

viscous liquid; pH 8.00-9.50

Study/Species/Lab Study # /Date	MRID	Results	Tox Cat	Core Grade
Acute oral toxicity / rat / sa-FORD (Sanctuary for research and development), India / 15- _91_001 /08- 13-2015 OECD 423	50192903	LD ₅₀ for females is >2000 mg/kg Doses were 300 and 2000 mg/kg. There was no mortality. There were no signs of toxicity. No external or internal signs of pathological changes noted at necropsy.	III	A
Acute dermal toxicity /rat / sa-FORD, India / 15_91_002 / 15- _91_002 /11-23-2015 OECD 402	50192904	LD ₅₀ for male and female rats is >2000 mg/kg. 5M & 5F were tested. There was no mortality. There were no signs of toxicity. No pathological abnormalities were noted at necropsy.	111	A
Acute inhalation toxicity / rat / sa-FORD, India / 15_91_003 /11- 04-2015 OECD 403	50192905	LC ₅₀ (males and females) >2.86 mg/L 3M & 3F were tested. MMAD= 3.76 μm GSD= 2.79 All survived to the end of the experimental period. There were no clinical signs. No internal or external pathological abnormalities were noted at the end of the 14d observation period	IV	A
Primary eye irritation / rabbit / sa-FORD, India / 15_91_006 /11- 25-2015 OECD 405	50192906	Not an irritant. All eyes scored 1 for conjunctival irritation at 1 hour. There was no corneal opacity or iritis. All scores were zero at 24, 48 & 72 hours.	IV	A
Primary dermal irritation / rabbit / sa-FORD, India / 15_91_005 /11- 25-2015 OECD 404	50192907	Not irritating. At 1 hr all scores for erythema = 1; all scores for edema were zero. At 24, 48 & 72 hrs all scores were zero.	IV	A
Dermal sensitization / Guinea pig / sa-FORD, India / 15_91_004 /11- 04-2015 OECD 406	50192908	Maximization test. Sensitizer: Positive response seen (patchy erythema at 24h and 48 h in 4/10 and 3/10 induced guinea pigs). Reliability study conducted with Benzocaine on May 11, 2015.	Pos- itive	A